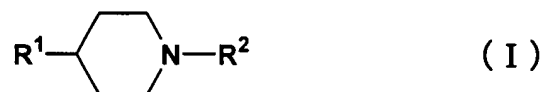
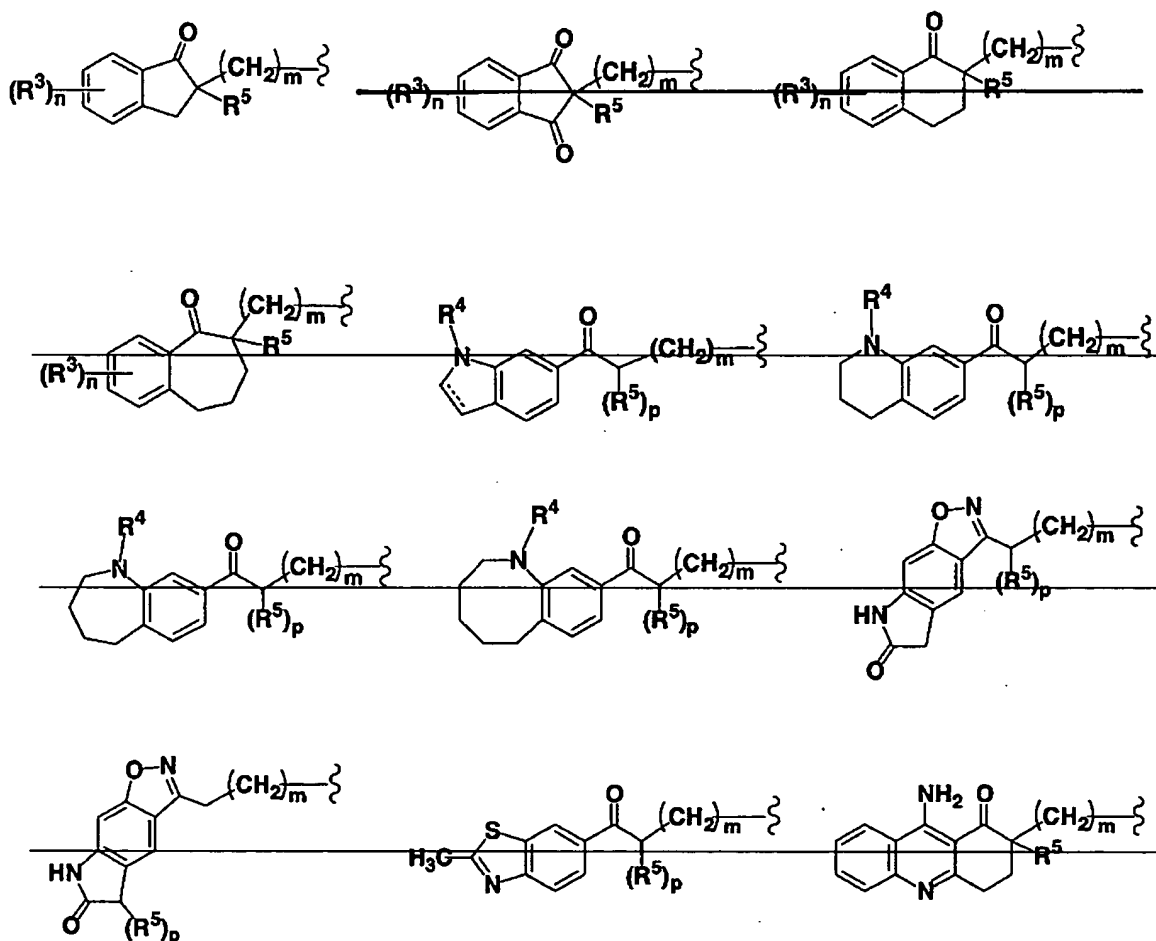


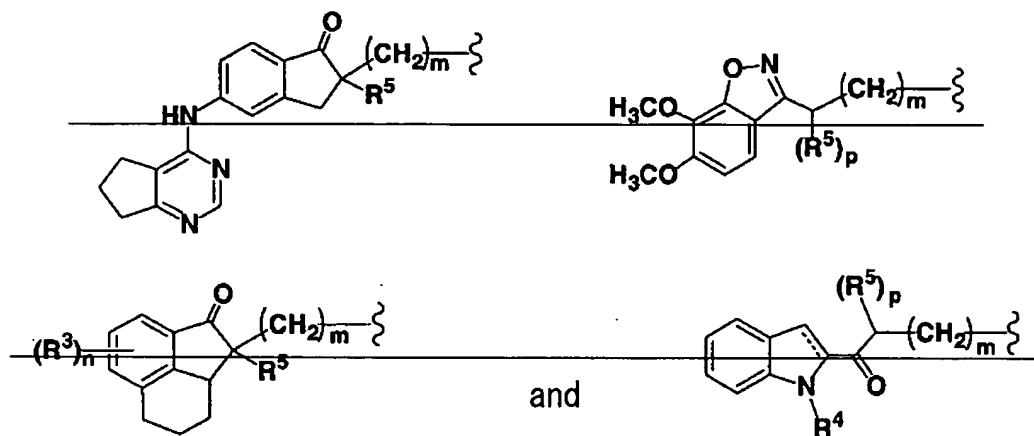
IN THE CLAIMS

1. (Currently Amended) A compound represented by the formula:



a pharmacologically acceptable salt thereof or hydrates thereof, wherein ~~in thereof. In~~ the formula, R^1 represents the formula: any group selected from the groups represented by the formulae:






~~wherein~~wherein:

(R³)s are the same as or different from each other and each represents hydrogen atom, a halogen atom, hydroxyl group, a C₁₋₆ alkyl group, a C₃₋₈ cycloalkyl group, a C₁₋₆ alkoxy group, a C₁₋₆ alkoxyalkoxy group, a halogeno C₁₋₆ alkyl group, a hydroxy C₁₋₆ alkyl group, a cyano C₁₋₆ alkyl group, an amino C₁₋₆ alkyl group, a halogeno C₁₋₆ alkoxy group, a hydroxy C₁₋₆ alkoxy group, a cyano C₁₋₆ alkoxy group, a lower acyl group, nitro group, an optionally substituted amino group, an optionally substituted carbamoyl group, mercapto group or a C₁₋₆ thioalkoxy group;

~~R⁴ represents hydrogen atom or a C₁₋₆ alkyl group;~~

R⁵ represents a halogen atom (provided that fluorine is excluded), hydroxy group, a C₁₋₆ alkyl group, a C₁₋₆ alkoxy group, cyano group, a halogeno C₁₋₆ alkyl group, a hydroxy C₁₋₆ alkyl group, a cyano C₁₋₆ alkyl group, an amino C₁₋₆ alkyl group, nitro group, an azido group, an optionally substituted amino group, an optionally substituted carbamoyl group, an optionally substituted carboxyl group, mercapto group or a C₁₋₆ thioalkoxy group;

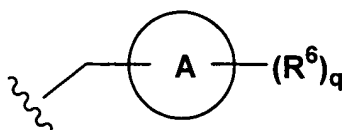
~~the partial structure  represents a single bond or double bond;~~

m is 0 or an integer from 1 to 6; and

n is an integer from 1 to 4; and

~~p is an integer of 1 or 2); and~~

R² represents a C₃₋₈ cycloalkylmethyl, a 2,2-(alkylenedioxy)ethyl or a group represented by the formula:



wherein:

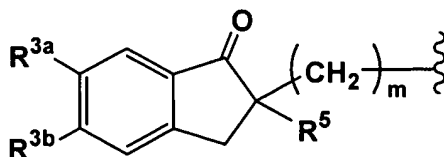
the ring A represents a benzene ring or a heterocyclic ring;

(R⁶)s are the same as or different from each other and each represents hydrogen, a halogen atom, hydroxyl group, nitrile group, a C₁₋₆ alkyl group, a C₃₋₈ cycloalkyl group, a C₁₋₆ alkoxy group, a C₁₋₆ alkoxyalkoxy group, an aryloxy group, an aralkyloxy group, a halogeno C₁₋₆ alkyl group, a hydroxy C₁₋₆ alkyl group, a cyano C₁₋₆ alkyl group, a halogeno C₁₋₆ alkoxy group, a hydroxy C₁₋₆ alkoxy group, a cyano C₁₋₆ alkoxy group, a loweracyl group, nitro group, an optionally substituted amino group, an optionally substituted amide group, mercapto group or a C₁₋₆ thioalkoxy group, and

two of the R⁶ may together form an aliphatic ring, an aromatic ring, a heterocyclic ring or an alkylenedioxy ring; and

q is 0 or an integer from 1 to 5.

2. (Currently Amended) The compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein R^1 is represented by the formula:



in which R^{3a} and R^{3b} are the same as or different from each other and each represents a C_{1-6} alkoxy group; ~~and R^5 and m have the same meanings as defined above~~

R^5 represents a halogen atom (provided that fluorine is excluded), hydroxy group, a C_{1-6} alkyl group, a C_{1-6} alkoxy group, cyano group, a halogeno C_{1-6} alkyl group, a hydroxy C_{1-6} alkyl group, a cyano C_{1-6} alkyl group, an amino C_{1-6} alkyl group, nitro group, an azido group, an optionally substituted amino group, an optionally substituted carbamoyl group, an optionally substituted carboxyl group, mercapto group or a C_{1-6} thioalkoxy group; and

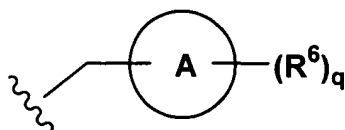
m is 0 or an integer from 1 to 6.

3. (Original) The compound according to Claim 2, a pharmacologically acceptable salt thereof or hydrates thereof, wherein R^{3a} and R^{3b} are methoxy groups.

4. (Original) The compound according to any of Claims 1 to 3, a pharmacologically acceptable salt thereof or hydrates thereof, wherein R^5 is chlorine or bromine.

5. (Original) The compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein m is 1.

6. (Currently Amended) The compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein R^2 is a group represented by the formula:



wherein: ~~the ring A , R^6 and q have the same meanings as defined~~
above

the ring A represents a benzene ring or a heterocyclic ring;
(R⁶)s are the same as or different from each other and each
represents hydrogen, a halogen atom, hydroxyl group, nitrile group,
a C₁₋₆ alkyl group, a C₃₋₈ cycloalkyl group, a C₁₋₆ alkoxy group, a C₁₋₆
alkoxyalkoxy group, an aryloxy group, an aralkyloxy group, a halogeno
C₁₋₆ alkyl group, a hydroxy C₁₋₆ alkyl group, a cyano C₁₋₆ alkyl group,
a halogeno C₁₋₆ alkoxy group, a hydroxy C₁₋₆ alkoxy group, a cyano C₁₋₆
alkoxy group, a lower acyl group, nitro group, an optionally substituted
amino group, an optionally substituted amide group, mercapto group
or a C₁₋₆ thioalkoxy group, and

two of the R⁶ may together form an aliphatic ring, an aromatic
ring, a heterocyclic ring or an alkylenedioxy ring; and

q is 0 or an integer from 1 to 5.

7. (Original) The compound according to Claim 6, a pharmacologically acceptable salt thereof or hydrates thereof, wherein the ring A is a benzene ring.

8. (Original) The compound according to Claim 6, a pharmacologically acceptable salt thereof or hydrates thereof, wherein the ring A is a pyridine ring.

9. (Original) The compound according to Claim 6, a pharmacologically acceptable salt thereof or hydrates thereof, wherein q is an integer of 1 or 2.

10. (Currently Amended) The compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, which is ~~the one~~ selected from the group consisting of:

1-benzyl-4-[(5,6-dimethoxy-2-chloro-1-indanon)-1-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-bromo-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-iodo-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-hydroxy-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-methyl-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-ethyl-1-indanon)-2-yl]methylpiperidine

ne,

1-benzyl-4-[(5,6-dimethoxy-2-azido-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-amino-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-methylamino-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-dimethylamino-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-acetamide-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-methanesulfonamide-1-indanon)-2-yl]methylpiperidine,

3-(1-benzylpiperidin-4-yl)-2-chloro-1-(2,3,4,5-tetrahydro-1H-1-benzoazepin-8-yl)-1-propanone,

3-(1-benzylpiperidin-4-yl)-2,2-dichloro-1-(2,3,4,5-tetrahydro-1H-1-benzoazepin-8-yl)-1-propanone,

5,7-dihydro-3-{1-chloro-2-[(1-(phenylmethyl)-4-piperidinyl)ethyl]-6H-pyrrolo[4,5-f]-1,2-benzisooxazol-6-one,

5,7-dihydro-3-{1,1-dichloro-2-[(1-(phenylmethyl)-4-piperidinyl)ethyl]-6H-pyrrolo[4,5-f]-1,2-benzisooxazol-6-one,

1-(2-methyl-6-benzothiazolyl)-3-[1-(phenylmethyl)-4-piperidinyl]-2-chloro-1-propanone, and

1-(2-methyl-6-benzothiazolyl)-3-[1-(phenylmethyl)-4-piperidinyl]-2,2-dichloro-1-propanone.

11. (Currently Amended) A pharmaceutical composition ~~medicament~~ comprising the compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof as an active element.

12. (Currently Amended) The pharmaceutical composition ~~medicament~~ according to Claim 11, which is an acetylcholinesterase inhibitor.

13. (Cancelled)

14. (Cancelled)

15. (Original) A medical composition comprising a pharmacologically effective amount of the compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof and a pharmacologically acceptable carrier.

16. (Currently Amended) A method of ~~preventing~~, treating or ameliorating diseases against which the inhibition of an acetylcholinesterase is effective, by administering a pharmacologically effective amount of the compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof to a patient.

17. (Currently Amended) A method of treating, ~~preventing~~ or ameliorating various types of senile dementia, cerebrovascular dementia or attention deficit hyperactivity disorder, which comprises ~~by~~ administering a pharmacologically effective amount of the compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof to a patient.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (New) A method of treating or ameliorating various types of senile dementia or cerebrovascular dementia, which comprises administering a pharmacologically effective amount of the compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof to a patient.